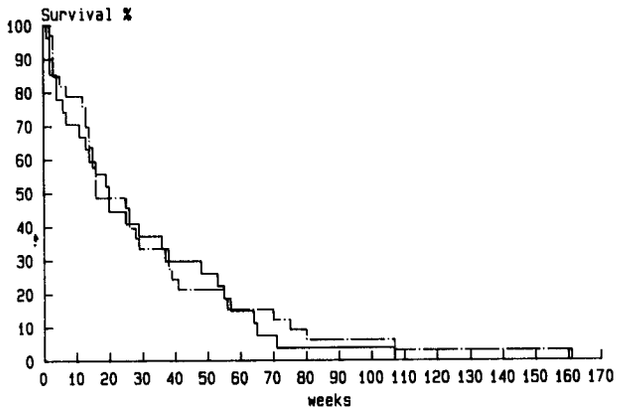

Figure. Survival plots for the two treatment regimens. Regimen I (——); regimen II (— · —).

The median time to progression was 16 weeks for patients receiving doxorubicin and 5-FU and 24 weeks for patients receiving doxorubicin and ftorafur. This difference was not statistically significant. There was no significant difference in survival between groups I and II. The median survival was 16 weeks for patients receiving doxorubicin and 5-FU and 25 weeks for patients receiving doxorubicin and ftorafur (Figure).

Discussion. The non-haematological toxicity was very similar in the two treatment regimens. However, the incidence of diarrhea was significantly higher in the ftorafur/doxorubicin-treated group. Aside from diarrhea and nausea/vomiting there was no major non-haematological side-effects. We found increase of liver enzymes (SGOT) in 5 patients from each treatment arm; this could not be attributed to drug toxicity, rather it indicated progressive disease. Kidney dysfunction has previously been reported (1) but was not observed in our series.

Haematological toxicity was more severe in the 5-FU/doxorubicin-treated group, with 61% of the patients having a WBC nadir below 3×10^9/l during the first cycle compared to only 28% in the ftorafur/doxorubicin-treated group. There was no significant depression of platelet count and all patients' platelet nadir during the first treatment course was above 150×10^9/l.

Despite the difference in toxicity there was no difference in the number of treatment cycles in which it was necessary to reduce the dose (28% vs 23%). We therefore conclude that the overall toxicity is about the same for the two drugs when given in the doses used in this trial and in combination with doxorubicin.

There was no difference in response to the two regimens, neither when assessed by time to progression nor as overall survival (Figure). The observed median survival in this trial was 16 weeks, which is in accordance with other reported results. In 33 trials including 1 100 patients the median survival was 22 weeks with a range of 7–38 weeks (10, 11).

In conclusion, we found no survival or toxicity benefit of ftorafur over 5-FU in the treatment of gastric cancer.

Key words: Gastric cancer, doxorubicin, 5-fluorouracil, oral ftorafur.

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METASTASIZING SERTOLI CELL TUMOURS OF THE HUMAN TESTIS—A REPORT OF TWO CASES AND A REVIEW OF THE LITERATURE

More than 90% of human testicular tumours are derived from the germ cells in the seminiferous tubules (1, 2). Tumours derived from the sustentacular cells of Sertoli, the interstitial cells of Leydig and mixtures of these, constitute 4–6% of the testicular tumours.

The Sertoli cell tumours, named androbalstoma by Teilum, constitute 1–1.5% of the testicular tumours (3). The Sertoli cell tumours are generally benign tumours, but on reviewing the literature 19 cases were found with a malignant course and details of clinical data (4–20). A further 4 cases were reported to have had a malignant course, but clinical data are not available (21). The histologic criteria of malignancy in testicular Sertoli cell tumours have still not been clearly defined.

From January 1, 1970 to December 31, 1986, 555 patients with testicular tumours were treated in the Department of Oncology and Radiotherapy, Odense University Hospital, which serves as an oncologic centre of an area with about 900 000 inhabitants. Two of these patients had Sertoli-Leydig cell tumours and 4

Table

Data on 21 metastasizing Sertoli cell tumours

Reference No.	Case No.	Age	Largest tumour diam. (cm)	Primary treatment	Time to metastasis	Site of metastasis	Status/survival from diagnosis
(4)	1	41	10.5	Orch	5 months	Widespread	Dead 5 months
(6)	2	27	?	Orch	3 months	Clinical sign of diss. disease	Dead 3 months
(16)	3	35	6	Orch	1 year	Clinical sign of diss. disease	Dead 1 year
	4	62	6	Orch	3 months	Palpable tumours in abdomen and in the groin	Dead 10 months
(18)	5	8	15	Orch + RPLND x-ray + vincristine	At diagnosis	Para-aortic nodes	NED 2 years
(11)	6	63	8	Orch + x-ray	3 years	Bone	Dead 56 months
(19)	7	79	7	Orch	7 weeks	Groin Para-aortic nodes	Dead 14 weeks
	8	27	15	Orch + x-ray	At diagnosis	Para-aortic nodes	NED 8 months
(13)	9	33	8	Orch	8 months	Para-aortic nodes Supra-clavicular nodes[a]	Alive 27 months
(15)	10	60	6	Orch + RPLND	9 months	Skin nodules Lung	Dead 39 months
(17)	11	44	?	Orch + x-ray +Chem + hormone	At diagnosis	Para-aortic nodes (supra-clavicular nodes, bone)	Dead 16 months
(10)	12	20	8.5	Orch	180 months	Left side of abdomen[b]	Alive 207 months
(7)	13	34	2	Orch + laparotomy +Chem	At diagnosis	Retroperitoneal tumour mass	Dead 13 months
(9)	14	57	8	Orch + x-ray	6 weeks	Lung Brain	Dead 15 weeks
(14)	15	74	8	Orch + x-ray	At diagnosis	Para-aortic nodes	NED 4 months
(8)	16	31	2	Orch + RPLND +x-ray	At diagnosis	Epididymis Para-aortic nodes	Ned 7 months
(12)	17	12	?	Orch + RPLN +x-ray + Chem	At diagnosis	Para-aortic nodes (bone)	Dead 13 months
(5)	18	16	15	Orch + RPLND	At diagnosis	Para-arotic nodes	NED 6 months
(20)	19	65	13	Orch	At diagnosis	Lung	Dead within 1 month
Present study	20[p]	42	1.5	Orch + x-ray	At diagnosis	1. Groin Para-aortic nodes	Dead 10 months
	21	58	10	Orch	5 months	Lung[c]	Dead 29 months

Orch: orchiectomy, x-ray: irradiation, RPLND: retroperitoneal node dissection, Chem: chemotherapy NED: no evidence of disease, ( ): developed later, a: treated with irradiation, b: treated with operation, c: treated with chemotherapy, p: previously reported in part by Hansen (22)

patients had pure Sertoli cell tumours. In 2 cases presented here the disease had a malignant course with histological Sertoli cell metastases (one was previously reported (22)). All specimens from primary operations, biopsies and autopsies were reviewed by one of the authors (BMH).

Case No. 1. A 42-year-old man (previously reported (22)) was admitted in November 1972 because of pain irradiating down the left lower extremity. For 6 months he had a growing tumour in the left groin and swelling of the left breast. Examination of the patient revealed a 1.5 cm tumour in the left testis. The tumour in the groin was removed, and orchiectomy was performed on the left side. Light microscopic examination of the testicular tumour showed a tumour composed of rather uniform, polygonal or columnar tumour cells arranged in a mixed tubular and trabecular pattern (Fig. 1). The cells had moderately pleomorphic nuclei with a coarse chromatin pattern, and many mitoses were seen. The cytoplasm was slightly eosinophilic. No other tumour components were found. The diagnosis was malignant Sertoli cell tumour. Lymphangiography showed enlargement of the left iliac and aortic lymph nodes. Radiotherapy to a dose of 38 Gy was given to the left groin and the iliac and aortic lymph nodes, after which the patient refused further treatment. The patient died in September 1973. At autopsy a retroperitoneal tumour was found, having the same histologic appearance as the primary testicular tumour.

Case No. 2. A 58-year-old man was admitted in August 1985 with a 10 × 6.5 × 5 cm tumour of the right testis. For a couple of months the patient had suffered increasing pain sensations in the right testis, fatigue, and episodes of profuse sweating. The patient had been aware of the tumour for about 5 years. Orchiectomy was performed. Light microscopy showed testicular tissue infiltrated by a partly necrotic tumour with tubular growth pattern. The tumour cells were columnar in form and were arranged in several layers around a central lumen. The cells had luminal orientated hyperchromatic nuclei, lightly stained cytoplasm and villous cytoplasmatic projections along the luminal border. Many mitoses were seen. Between the tumour tubuli a richly vascularized connective tissue was found, with focal vascular invasion. No other tumour components could be found. The diagnosis was Sertoli cell tumour. Chest radiography, lymphangiography and CT scans of thorax and abdomen showed no metastases. The patient was observed without further treatment. On routine follow-up in January 1986, chest radiography and CT scan showed bilateral pulmonary metastases. A thoracotomy was performed on the left side with excision of 2 metastases which were histologically similar to the primary Sertoli's tumour (Fig. 2). The patient was treated with 6 courses of chemotherapy (cisplatin, doxorubicin and cyclophosphamide). The remaining pulmonary metastases regressed totally, but the disease recurred 20 months later. Following cisplatin (40 mg/m^2 days 1–5), etopside (150 mg/m^2 days 1–5) and bleomycin (15 mg days 1–5) the tumour regressed. However, after 4 cycles of treatment he died in January 1988 due to a septic chock. No tumour remnants were found at autopsy.

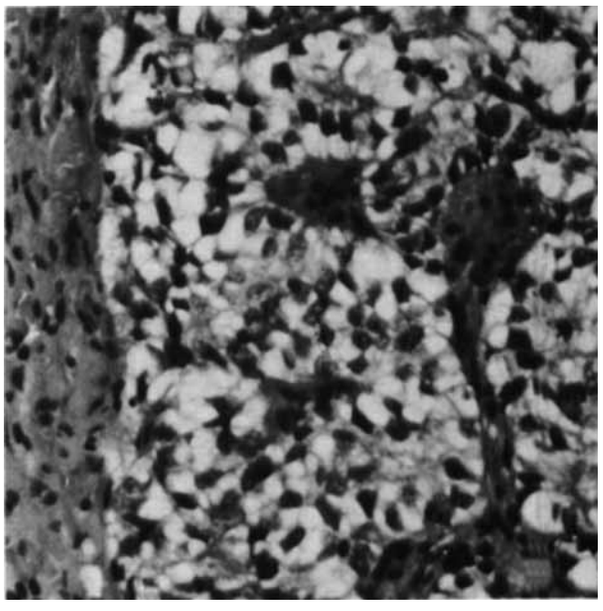

Fig. 1. Primary testis tumour with mixed tubular and trabecular pattern (Case No. 1). Several mitoses can be seen (arrows). H & E. (× 125).

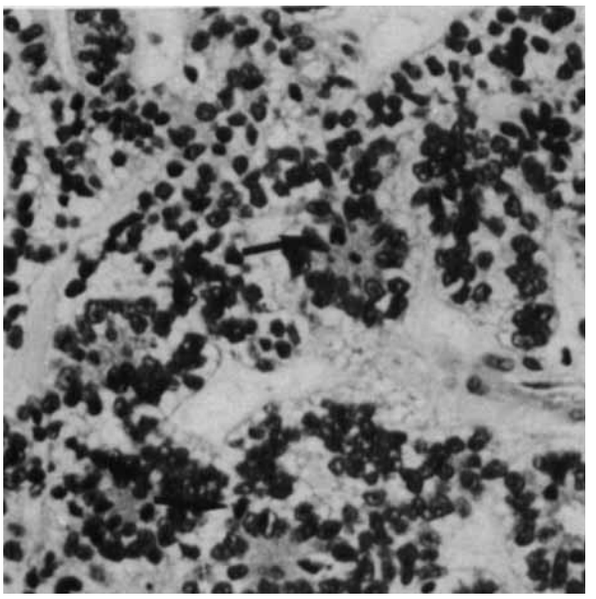

Fig. 2. Pulmonary metastases from malignant Sertoli cell tumour (Case No. 2.) H & E. (× 125).

Human chorion gonadotropin (HCG) was measured in both patients. Alpha fetoprotein (AFP) and placenta alkaline phosphatase were measured in one patient. The assays were negative and remained so when metastases developed.

Discussion. There is a diversity of nomenclature for testicular stromal tumours in the literature. The World Health Organization (WHO) subdivides the sex cord/stromal tumours into fully differentiated forms (Leydig cell, Sertoli cell and granulosa tumours) and incompletely differentiated forms (23).

In 1953, Dixon & Moore (1) analyzed a series of 990 testicular tumours. They found a frequency of 1.6% of stromal tumours. In 1964, Collins & Pugh (24) reported a frequency of 2.0% of stromal tumours in a series of 995 testicular tumours. Reviewing the literature, Proppe & Scully (17) found 128 Sertoli cell tumours, of which 16 (12%) had a malignant course. Mostofi & Davis Jr (25) have suggested that 10% are malignant. In the present series, 2 out of 4 cases had a well-documented malignant course. When combining the 4 patients reported here with the patients reviewed by Proppe & Scully a malignant course may be predicted in about 15% of Sertoli cell tumours.

The clinical data are summarized in the Table. The median age was 41 years (range 8–79 years). An enlarged mass in scrotum was a prominant feature in 18 of 20 cases. In 10 of 17 patients (59%) the scrotal mass was observed for less than a year and in

the remaining patients for more than 3 years (3–8 years). The median of the largest dimension was 8 cm (1.5–15 cm). Four patients (22%) had a tumour with a diameter of 13 cm or more.

Pain was a prominent symptom in 9 of 18 patients, due either to the primary tumour or to metastases.

Gynecomastia was present at the time of diagnosis in 5 of 16 patients. HCG was measured in 10 patients and was negative in all. AFP was measured in 5 patients and was negative. This small series does thus not indicate a value of germ cell tumour markers in malignant Sertoli cell tumours.

At presentation 10 patients (48%) had metastases and in 9 of them the para-aortic nodes were involved. In 9 of the 11 patients which had primarily localized tumours metastases appeared within one year after orchiectomy. One patient developed metastases after about 3 years and another patient after 15 years. Five patients (28%) had only distant metastases (lung, bone, skin and brain).

Eight of 11 patients with disease localized to the testis were treated with orchiectomy alone. Irradiation of para-aortic nodes and/or retroperitoneal node dissection seem to have provided effective local treatment. None of the 13 patients (11 primary and 2 recurrences) so treated developed para-aortic node recurrence.

Chemotherapy was disappointing in all but one patient (Case No. 21). Combinations of cisplatin, vinblastine and bleomycin, or cisplatin, etopside and bleomycin, used successfully in testicular germ cell tumours, were of little value in 3 patients. One patient, however, obtained complete remission of lung metastases after a combination of cisplatin, doxorubicin and cyclophosphamide but got recurrence twenty months later. A new complete remission was achieved by intensified chemotherapy with cisplatin, etopside and bleomycin.

From this review it can be concluded that metastasizing Sertoli cell tumours as a rule have a very poor prognosis with short survival.

On the basis of the present experience we are suggesting that Sertoli cell tumours localized to the testis should be treated primarily by simple orchiectomy and then observed for at least 3 years. In case of dissemination or recurrence a combination of local treatment and chemotherapy should be tried.

Key words: Testis, Sertoli cell tumours, malignant, case reports, review of literature.

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PITYRIASIS VERSICOLOR CONFINED TO THE RADIATION THERAPY FIELD

Acute radiation reaction depends of field size, dose, and fractionation used. Clinically it ranges from erythema, edema, dry desquamation and exudative epidermitis. Appearance of acute skin disorders within treatment fields other than acute radiation reaction is unusual.

Case report. The patient was a 53-year-old man with squamous cell carcinoma in the pharyngeal wall without evidence of cervical node involvement. Irradiation against the neck and supraclavicular area with a 6 MV photon beam was started. The intention was